

Docket No. 08CS5966-2

Remarks

Claims 3, 5-8, 18, 20, and 31 are pending in the present application. Claims 3 and 18 have been amended to correct typographical errors. Paragraph 15 on page 5 of the Specification has also been amended to correct typographical errors. No new matter has been introduced by these amendments. New Claims 32-33 have been added having support in the application as filed on pages 5-6. Claims 3, 5-8, 18, 20, and 31-33 remain for consideration upon entry of the present amendment. Reconsideration and allowance of the claims is respectfully requested in view of the above amendments and the following remarks.

1. Specification and Claim Objections

The Specification on page 5 at paragraph 15, and Claims 3 and 18 have been amended to remove typographical errors objected to by the Examiner.

2. Claim Rejections under 35 U.S.C. § 112, Second Paragraph

Claims 3, 5-8, 18, 20, and 31 stand rejected under 35 U.S.C. § 112, Second Paragraph as allegedly being indefinite for failing to particularly point out and distinctly claim the subject matter which the applicant regards as the invention.

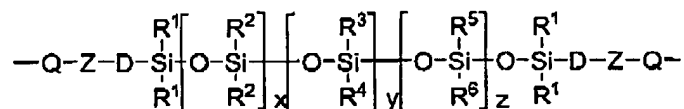
Independent Claims 3 and 18 have been amended to correct the word "hydrocarbonyl" to --hydrocarbon--; the word "alkoylate" to --alkoxylate--; and the word "haloalkyoxy" to --haloalkoxy--. The Z functionality of H and -SH- has been deleted from the same claims. The Z functionality of -NH<sub>2</sub>- has been retained as the Claims encompass ionic siloxanes which may include groups such as protonated amines (-<sup>+</sup>NH<sub>2</sub>-).

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3. Claim Rejections Under 35 U.S.C. § 102(b)

Claims 3 and 6-7 stand rejected under 35 U.S.C. § 102(b), as allegedly anticipated by Berger, U.S. Patent No. 4,499,149. The Applicant respectfully traverses this rejection.

Berger generally discloses polymeric compositions containing polysiloxane units of the formula



where Q is a substituted or unsubstituted aromatic group; Z is  $-\text{O}-$ ,  $-\text{S}-$ ,  $-\text{S}(\text{O})-$ ,  $-\text{S}(\text{O})_2-$ ,  $-\text{S}(\text{O})_2\text{NH}-$ ,  $-\text{NHS}(\text{O})_2-$ ,  $-\text{C}(\text{O})\text{NH}-$ ,  $-\text{NHC}(\text{O})-$ ,  $-\text{C}(\text{O})\text{O}-$ , or  $-\text{OC}(\text{O})-$ ; D is unsubstituted or substituted hydrocarbylene;  $\text{R}^1$ ,  $\text{R}^2$ ,  $\text{R}^3$ ,  $\text{R}^4$ ,  $\text{R}^5$ , and  $\text{R}^6$  each, independently, is unsubstituted or substituted hydrocarbyl; and x, y and z each independently has a value from 0 to 100. (Col. 2, lines 1-31)

To anticipate a claim, a reference must disclose each and every element of the claim. *Lewmar Marine v. Varient Inc.*, 3 U.S.P.Q.2d 1766 (Fed. Cir. 1987).

Berger fails to disclose each and every element of independent Claim 3. Claim 3 requires one of two types of silicone compounds. The first type contains only hydrocarbon functionality pendant from the silicon atoms of the silicone compound. The first type of silicone compound of Claim 3 is as follows:

wherein the silicone compound is of the formula:



wherein the subscripts a, c, d, e, f, and g are zero or a positive integer, subject to the limitation that the sum of the subscripts b, d, and f is one or greater; M has the formula:  $\text{R}^1_3 \text{SiO}_{1/2}$ , wherein each  $\text{R}^1$  is independently a monovalent hydrocarbon radical having from one to forty carbon atoms; M' has the formula:  $\text{R}^2_{3-h} \text{R}^3_h \text{SiO}_{1/2}$ , wherein each  $\text{R}^2$  and  $\text{R}^3$  are independently monovalent hydrocarbon radicals having from one to forty carbon atoms, and the subscript h is 1, 2, or 3; D has the formula:  $\text{R}^4_2 \text{SiO}_{2/2}$ , wherein each  $\text{R}^4$  is independently a monovalent hydrocarbon

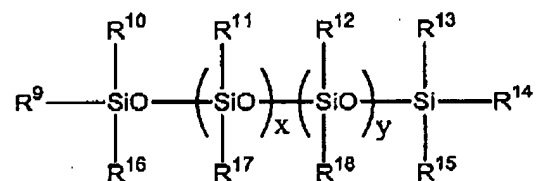
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radical having from one to forty carbon atoms; D' has the formula:  $R^5_2$ ,  $R^6_iSiO_{2/2}$ , wherein each of  $R^5$  and  $R^6$  is independently a monovalent hydrocarbon radical having from one to forty carbon atoms, and the subscript  $i$  is 1 or 2; T has the formula:  $R^7SiO_{3/2}$ , wherein each  $R^7$  is a monovalent hydrocarbon radical having from one to forty carbon atoms; T' has the formula:  $R^8SiO_{3/2}$ , wherein  $R^8$  is a monovalent hydrocarbon radical having from one to forty carbon atoms; and Q has the formula:  $SiO_{4/2}$ ,

Berger's polysiloxane contains other functionality at the terminal ends of the siloxane moiety (see the Z group: -O-, -S-, -S(O)-, -S(O)<sub>2</sub>-, -S(O)<sub>2</sub>NH-, -NHS(O)<sub>2</sub>-, -C(O)NH-, -NHC(O)-, -C(O)O-, or -OC(O)-). The Applicant respectfully argues that Berger does not teach silicone compounds as defined by the first set of compounds in Claim 3.

The second set of compounds in Claim 3 requires hydrocarbon functionality at the terminal silicon atoms of the molecule; see  $R^9$ ,  $R^{10}$ ,  $R^{13}$ ,  $R^{14}$ ,  $R^{15}$ , and  $R^{16}$  of the second type of silicone compounds as set forth below:

the silicone compound is an ionic or nonionic siloxane alkoxyate of the formula:



wherein each of  $R^9$  through  $R^{17}$  are independently a monovalent hydrocarbon radical, and  $R^{18}$  is  $R^{19}-Z-(C_mH_{(2m-1)}R^{20}O)_j(C_nH_{2n}O)_kR^{21}$ , wherein  $m$  and  $n$  are integers greater than or equal to 0;  $j$  and  $k$  are integers greater than or equal to 0, subject to the proviso that the sum of  $j + k$  is greater than or equal to 1;  $Z$  is -O-, -S-, -CO-, or -NH-;  $R^{19}$  is a divalent hydrocarbylene radical,  $R^{20}$  and  $R^{21}$  are independently hydrogen, alkyl, hydroxyalkyl, amino, amide, amineoxide, cyano, isocyano, aryl, arylene, carboxy, alkoxy, halogen, haloalkyl, haloalkoxy, sulfo, sulfamo, phosphono, salts thereof, combinations comprising at least one of the foregoing moieties, and wherein  $x$  and  $y$  are integers greater than or equal to 0, subject to the proviso that  $x + y$  is greater than or equal to 1.

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Berger does not teach a silicon compound having only hydrocarbon functionality at the terminal silicon atoms. Again Berger teaches a polysiloxane that contains functionality at the terminal ends of the siloxane moiety besides hydrocarbon (see the Z group: -O-, -S-, -S(O)-, -S(O)<sub>2</sub>-, -S(O)<sub>2</sub>NH-, -NHS(O)<sub>2</sub>-, -C(O)NH-, -NHC(O)-, -C(O)O-, or -OC(O)). Since the element requiring silicone compounds that contain only hydrocarbon functionality or silicone compounds requiring only hydrocarbon functionality at the terminal silicon atoms is not taught by Berger, Claim 3 is not anticipated by that reference. Accordingly, the Applicant respectfully requests reconsideration and removal of the 35 U.S.C. § 102(b) rejections of Claims 3 and the dependent Claims 6-7.

4. Claim Rejections Under 35 U.S.C. § 103(a)

Claims 8 and 31 stand rejected under 35 U.S.C. § 103(a) as allegedly unpatentable over Berger.

For an obviousness rejection to be proper, the Examiner must meet the burden of establishing a *prima facie* case of obviousness, i.e., that all elements of the invention are disclosed in the prior art. *In re Fine*, 5 U.S.P.Q.2d 1596, 1598 (Fed. Cir. 1988); *In re Wilson*, 165 U.S.P.Q. 494, 496 (C.C.P.A. 1970); *Amgen v. Chugai Pharmaceuticals Co.*, 927 U.S.P.Q.2d, 1016, 1023 (Fed. Cir. 1996).

Both Claims 8 and 31 require one of two types of silicone compounds which are not disclosed in Berger. Claims 8 and 31 both require a silicone compound containing only hydrocarbon functionality pendant from the silicon atoms of the silicone compound, or a silicone compound requiring hydrocarbon functionality at the terminal silicon atoms of the molecule (see R<sup>9</sup>, R<sup>10</sup>, R<sup>13</sup>, R<sup>14</sup>, R<sup>15</sup>, and R<sup>16</sup>) as detailed above. The silicone compounds of the Claims are chemically distinct from the polysiloxanes described in Berger. As mentioned above, the polysiloxanes as taught by Berger have functionality at their terminal ends. The functionality is used to link the polysiloxane to polymers, such as polyimides. (Abstract) One of ordinary skill in the art would not be motivated to modify Berger's polysiloxanes to remove the functionality or to shift the functionality away from the terminal ends of the polysiloxane. As Berger fails to teach or suggest either of these two types of silicone compounds, Claims 8 and 31 have not been rendered obvious. Accordingly, the Applicant

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requests reconsideration and removal of the § 103(a) rejections to Claims 8 and 31.

Claims 3, 5-8, 18, 20, and 31 stand rejected under 35 U.S.C. § 103(a) as allegedly unpatentable over Anderson et al., U.S. Patent No. 5,932,405 (hereinafter "Anderson"), in view of Berger.

Anderson generally discloses a photographic element which includes a support, at least silver halide light sensitive layer superposed on the support, and an outermost protective overcoat superposed on the support. The protective overcoat includes a water dispersible siloxane-containing polyurethane.

The Examiner has stated, "Anderson does not disclose the same silicon compounds as recited in claims 3 and 18." (Office Action dated 6/5/2003, page 7) The Applicant agrees with that statement. The Examiner further stated, "the composition [of Berger] comprises the same material as claimed in claims 3 and 18." (Id.) The Applicant respectfully disagrees that Berger teaches the same siloxane compounds as required by independent Claims 3 and 18. As described above, Berger's polysiloxane compounds do not teach or suggest either one of two types of silicone compounds required by the claims: a silicone compound containing only hydrocarbon functionality pendant from the silicon atoms of the silicone compound, or a silicone compound requiring hydrocarbon functionality at the terminal silicon atoms of the molecule (see R<sup>9</sup>, R<sup>10</sup>, R<sup>13</sup>, R<sup>14</sup>, R<sup>15</sup>, and R<sup>16</sup>) as detailed above. As Berger fails to teach or suggest either of these two types of silicone compounds, independent Claims 8 and 31 have not been rendered obvious. Accordingly, the Applicant requests reconsideration and removal of the § 103(a) rejections for Claims 3 and 18 and dependent Claims 5-8, 20, and 31.

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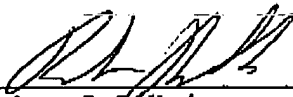
It is believed that the foregoing amendments and remarks fully comply with the Office Action and that the claims herein should now be allowable to the Applicant. Accordingly, reconsideration and allowance is requested.

If there are any additional charges with respect to this Amendment or otherwise, please charge them to Deposit Account No. 07-0862 maintained by Assignee.

Respectfully submitted,

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